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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/463,096	04/12/2000	HANS TANDLER	GK-ZEI-3078	5855

26418 7590 09/19/2006

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EXAMINER

FINEMAN, LEE A

ART UNIT PAPER NUMBER

2872

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/463,096

Applicant(s)

TANDLER ET AL.

Examiner

Lee Fineman

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 15, 17-23, 25-28, 30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 15, 17-23, 25-28, 30 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/11/00 & 9/11/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 July 2006 has been entered in which claims 13 and 25 have been amended. Claims 13, 15, 17-23, 25-28 and 30-31 are pending.

Claim Objections

2. Claim 28 is objected to because of the following informalities: It is unclear whether the limitation "a different number of discrete individual steps per unit of time" is the same different number of discrete individual steps per unit of time detailed in the independent claim. For the purposes of examination, the steps will be taken to be the same. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 13, 15, 17-21, 23, 25-26, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Figure 1 of the instant application which is admitted prior art (Admission) in view of Nagashima et al., US. 5,742,735 and Kaneda, US 5,973,857.

Regarding claims 13, 15, 17 and 23, Admission discloses a stereomicroscope with a zoom system (fig. 1) comprising a drive motor (M) driving at least one moving lens system (L1 and L2) having first and second moving lenses (unnumbered pair of lenses in L1 and L2) by moving each of the first and second moving lenses (unnumbered pair of lenses in L1 and L2) to a desired reference point (the point at which the desired zoom is established). The at least one moving lens system (L1 and L2) are provided as lens pairs in a Greenough type stereomicroscope or telescope type stereomicroscope (Admission, fig 1). Admission lacks first and second linear direct driving motors having a step-wise resolution being controlled by a control unit which reads from a memory calculated pre-stored values of reference points from a mathematical controlling curve for simultaneously directing the movement of the first and second moving lenses by controlling the driving motors in a corresponding manner to cover a different number of discrete individual steps per unit according to the mathematical curve for each of the first and second direct driving motors without necessitating use of mechanical generation of the mathematical controlling curve; and the control unit being used for motorized zoom adjustments and motorized focusing of the microscope. Nagashima et al. teaches a zoom system with first and second driving means (9 and 10) being controlled by a control unit (6) which reads from a memory (column 2, lines 55-56) calculated pre-stored values of reference points from a mathematical controlling curve for directing the movement of first and second moving lenses (2 and 3) by controlling the driving means in a corresponding manner without

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necessitating use of mechanical generation of the mathematical controlling curve (column 3, lines 13-24) and the control unit being used for motorized zoom adjustment and for motorized focusing (column 3, lines 13-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the drive unit of Admission with a drive unit of Nagashima et al. to provide a more simple system with less moving parts. Nagashima et al. discloses driving means to linearly move the lens groups. This arrangement appears to be direct linear drive motors having a step-wise resolution. However in as much as direct linear drive motors are not explicitly disclosed, use of such motors are well know in the art for zoom systems. For example, Kaneda teaches zooming wherein direct linear driving motors having a step-wise resolution are used (stepper motors, column 4, lines 48-51). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use well known direct linear drive motors like those of Kaneda to provide precise linear movement of the lens groups. Further, although Nagashima demonstrates different tracking curves for each lens movement, Nagashima does not explicitly state that the driving motors are controlled in a corresponding manner to each of the lenses to cover a different number of discrete individual steps per unit according to the mathematical curve. Kaneda further teaches variable speed stepper motors for ease of positioning different lens groups (column 14, lines 9-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the motors variable speed (i.e., cover a different number of discrete individual steps per unit) as suggested by Kaneda provide faster zooming (Kaneda, column 14, line 27-33). Therefore, the first and second lenses will reach the desired reference point (i.e. the desired zoom amount) in discrete individual steps of varying magnitude.

Regarding claim 20, Admission in view of Nagashima et al. and Kaneda further disclose wherein the at least one moving lens system (L1 or L2) are a plurality of moving lens members and are controlled jointly (Admission, fig. 1).

Regarding claims 18 and 19, Admission in view of Nagashima et al. and Kaneda further disclose the claimed invention but are silent to the linear drives being arranged in the stereomicroscope housing and between the lens pairs. Official Notice is taken that having linear drives being arranged in a device housing is well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the linear drives of Admission in view of Nagashima et al. and Kaneda be arranged in the stereomicroscope housing in order to protect against foreign particles, etc. which would interfere with the operation of the motors. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the driving motors of Admission in view of Nagashima et al. and Kaneda to be between the lens pairs, since it has been held that a mere rearrangement of an element without modification of the operation of the device involves only routine skill in the art. One would have been motivated to rearrange the driving motors to be between the lens pairs again for the purpose of making the overall device more compact. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950). It is noted as directed by the MPEP 2144.03 that if the applicant does not seasonably traverse the well-known statement during examination, then the object of the well-known statement is taken to be admitted prior art. *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). As such, the above official notice statement of the examiner is now held to be admitted prior art.

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Regarding claim 21, Admission further discloses two lens members (L1 and L2) that comprise at least one moving lens system (fig. 1). Admission discloses the claimed invention except for the two lens members being controlled independently from one another and driven separately. Nagashima teaches a zoom system wherein two lens members (2 and 3) are being controlled independently from one another and driven separately (through 9 and 10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make each of the lens members of Admission be controlled and driven separately, as suggested by Nagashima to provide further flexibility and improved accuracy (Nagashima, column 1, lines 40-44)

Regarding claims 25-26, 28 and 30, Admission in view of Nagashima et al. and Kaneda as applied to claim 13 above, disclose the claimed invention except for the control unit operable to perform an initialization of the first and second direct driving motors to find a predetermined position upon power-up or to find a zero point for the two motors. Kaneda further disclose in column 12, lines 22-31 where a control unit (410) operable to perform an initialization of direct driving motors (145 and 162) to find a predetermined position upon power-up (datum reset position, column 12, lines 30-31) which is a zero point for the two motors (in so far as the pulse counting begins at zero). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the control unit of Admission in view of Nagashima et al. and Kaneda perform an initialization to be able to more accurately measure zooming distances and lens positions.

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5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Admission in view of Nagashima et al. and Kaneda as applied to claim 13 above, and further in view of Pensel et al, US 5,867,308.

Admission in view of Nagashima et al. and Kaneda as applied to claim 13 above disclose the claimed invention except for a linear magnification that is adjusted is determined and displayed during the controlling of the zoom system. Pensel et al. teach a linear magnification that is adjusted is determined and displayed during the controlling of the zoom system (12, fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the linear magnification of Admission in view of Nagashima et al. and Kaneda that is adjusted be determined and displayed as Pensel et al. suggests in order to arrive at a desired magnification with ease.

6. Claims 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admission in view of Nagashima et al. and Kaneda as applied to claims 26 and 30 above, and further in view of Hirasawa, US 5,570,236.

Admission in view of Nagashima et al. and Kaneda as applied to claims 26 and 30 above disclose the claimed invention except for wherein the initialization includes directing the two motors to move the first and second moving lenses to their lowest magnification. Hirasawa teaches in fig. 8(a), step S16 and column 7, lines 59-60, that the initialization can include directing the motors to move the zooming lenses to their lowest magnification. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have

the initialization include moving the motors to their lowest magnification as suggested by Hirasawa to provide a more consistent initialization/starting point for faster control calculations.

Response to Arguments

7. Applicant's arguments filed 11 July 2006 have been fully considered but they are not persuasive.

Applicant argues that the combination of Admission, Nagashima and Kaneda fails to teach or suggest the first and second lenses reaching a desired reference point in discrete individual steps of varying magnitude. The examiner respectfully disagrees and points to the applicant's own description of the combination of the cited references. The applicant states on page 7, lines 10-12 that the "the combination of the cited references discloses lenses that are position controlled which means that if a first lens has to move a longer distance than a second lens, then the second lens reaches its destination earlier than the first lens." Clearly the first and second lenses must have steps of varying magnitude if they are reaching the desired reference point at different times. Therefore the combination meets the claim limitation. It is noted that the features upon which applicant relies (i.e., timing of each of the lenses reaching a desired reference point) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

8. It is noted by the Examiner that the 112 rejection made in the previous Office Action have been withdrawn due to amendment by the Applicant.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


LAF

7 September 2006


MARK A. ROBINSON
PRIMARY EXAMINER